

## EMS for Children

# Data Analysis Research Team

D.A.R.T.



## Pediatric DART: Maryland Burn Injuries in Children

Injury is the leading cause of childhood death and hospitalization between the ages of one and fourteen. During the month of February each year, the focus of injury prevention networks is Burn Prevention and how to keep children safe in their homes and communities. Burns are categorized into four major types: Electrical, Chemical, Thermal, and Inhalation. Based upon the data from the Maryland Burn Centers – the focus of this article will be on Thermal Burns and preventing them. Thermal burns include: flame, contact, and scald mechanisms.

The charts and graphs below provide a snap shot of the Burn Facts in Maryland for those children seen in Burn Centers:

- Who: Children are at greatest risk between the ages of 1 year to 9 years of age
- What: The majority of burns to children are from scalds and contact with hot objects
- Where: The majority of burns in children occur in the home
- When: Burns occur throughout the 24 hour period but peak between 12 Noon and 12 Midnight
- When: Burns occur evenly in all seasons of the year

The MIEMSS Annual Report provides details by county, age and hospital ([www.miemss.org](http://www.miemss.org)).

### Etiology of Injuries by Age

Patients Treated at Pediatric Burn Centers and Patients Less Than Age 15 Treated at Johns Hopkins Burn Center at Bayview (June 2013 to May 2014)

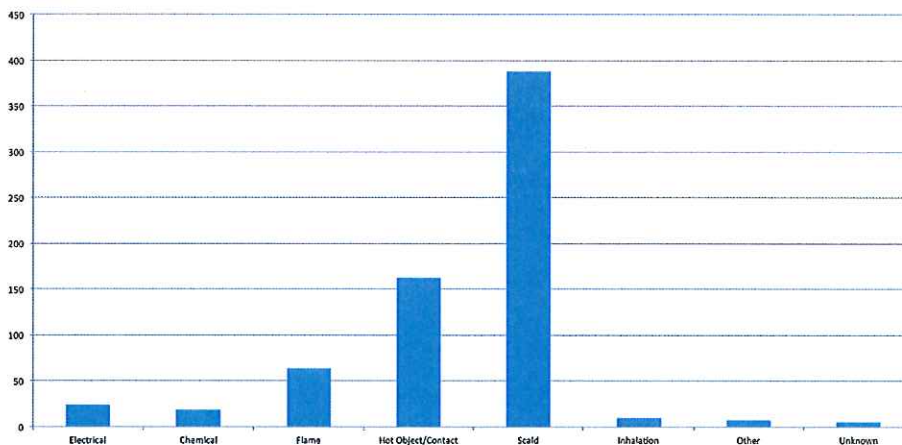
Source: Maryland State Trauma Registry

Age Range	Electrical	Chemical	Thermal			Inhalation	Other Burn	Other Non-Burn	Unknown	Total
			Flame	Contact	Scald					
Under 1 year	1	1	4	30	45	4	2	1	0	88
1 to 4 years	18	5	11	91	211	1	1	1	5	344
5 to 9 years	1	4	26	27	76	4	0	0	0	138
10 to 14 years	4	3	17	10	41	1	1	1	0	78
15 years and over	0	5	5	4	15	0	1	0	0	30
Total	24	18	63	162	388	10	5	3	5	678

### Etiology of Injury

Patients Treated at Pediatric Burn Centers and Patients Less Than Age 15 Treated at Johns Hopkins Burn Center at Bayview June, 2013 to May, 2014

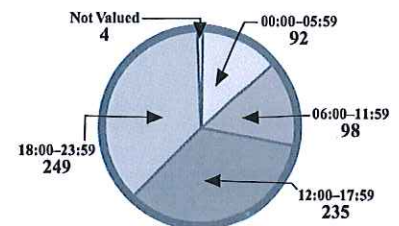
Source: Maryland State Trauma Registry



### Time of Arrival Distribution

Patients Treated at Pediatric Burn Centers and Patients Less Than Age 15 Treated at Johns Hopkins Burn Center at Bayview (June 2013 to May 2014)

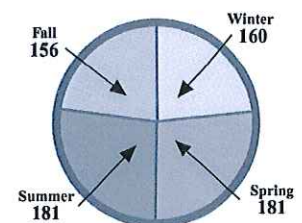
Source: Maryland State Trauma Registry



### Season of Year Distribution

Patients Treated at Pediatric Burn Centers and Patients Less Than Age 15 Treated at Johns Hopkins Burn Center at Bayview (June 2013 to May 2014)

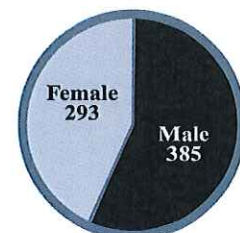
Source: Maryland State Trauma Registry



### Gender Profile

Patients Treated at Pediatric Burn Centers and Patients Less Than Age 15 Treated at Johns Hopkins Burn Center at Bayview (June 2013 to May 2014)

Source: Maryland State Trauma Registry



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## Pediatric DART: Maryland Burn Injuries in Children

Keeping children safe and secure is the responsibility of the adults in their family and community. Below are some easy steps to take to prevent burns in the home and when combined with adult supervision will protect children from harm.

- ☹ Check water heater temperature – set no higher than 120° F/ 48° C (or just below the medium setting)
- ☹ Always supervise children in bathtub (ignore the phone/ doorbell)
- ☹ Install anti-scald devices in water faucets and shower heads
- ☹ Place pots & pans on the back burner with handles turned inward to the back of the stove
- ☹ Use back burners on stove
- ☹ Never carry a child while cooking or pouring anything hot – not even to open the microwave
- ☹ Keep hot drinks and food away from the edge of counters and tables
- ☹ Keep appliance cords out of reach and behind the cooking device
- ☹ Keep hair dryers, curling irons and cloth irons out of reach when in use and when cooling
- ☹ Consider flameless (battery operated) candles throughout your home
- ☹ Install safety gates into the kitchen, around fireplace and wood stove
- ☹ Keep matches, lighters and gasoline/ lighter fluid up and away from children
- ☹ Cover electrical outlets with safety caps

### Burn and Fire Prevention Resources include:

American Burn Association (ABA) [www.ameriburn.org/](http://www.ameriburn.org/)  
Consumer Products Safety Commission [www.cpsc.gov](http://www.cpsc.gov)  
National Fire Protection Association (NFPA) [www.nfpa.org](http://www.nfpa.org)